Issuance Date: March l, 2005 Effective Date: April 1, 2005 Expiration Date: February 28, 2010

RECLAIMED WATER PERMIT NUMBER ST 8031

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY (Eastern Regional Office)

In compliance with the provisions of the
State of Washington Reclaimed Water Act, Chapter 90.46 Revised Code of Washington
and the
Water Pollution Control Law Chapter 90.48 Revised Code of Washington, as amended,

In compliance with the provisions of Chapter 90.46 and 43.70Revised Code of Washington

City of Royal City
P.O. Box 1239
Royal City, WA 99357-1239

to discharge wastewater in accordance with the special and general conditions which follow.

<u>Plant Location</u>: on 125 Apple Avenue NE <u>Discharge Location</u>: Sec 6, T16N, R26 E.W.M

<u>Treatment Type</u>: extended aeration activated sludge with coagulation, filtration and

ultraviolet disinfection

Latitude: 46° 53′ 54″ N Longitude: 119° 36′ 45″ W

> James M. Bellatty Water Quality Section Manager Eastern Regional Office

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report (DMR)	Monthly	April 15, 2005
S3.A	Influent and Effluent Priority Pollutant Scan	Twice per permit term	September 30, 2006 and 2009
S3.F.3.	Monthly Summary of Operating Records	Monthly with DMR	April 15, 2005
S3.F.5.	Cross Connection Control Report	Annual	September 1, 2005
S4.C.	Wasteload Assessment	1/year	September 1, 2005
S5.G.	Operations and Maintenance Manual Update	1/permit cycle	June 1, 2008
S8.B.	Water Reuse Plan	1/permit cycle	Update as needed
S8.F.	Service and Use Area Agreement	As needed	
S8.G.	Reclaimed Water Ordinance	As needed	
S8.H.	Irrigation Use Design	As needed	
G8.	Application for permit renewal	1/permit cycle	September 30, 2009

DMRs and Reclaimed Water Reports shall be submitted to the following addresses:

- 1. Department of Ecology, Permit Coordinator (Eastern Regional Office, 4601 N Monroe Street, Suite 202, Spokane, WA 99205-1295)
- 2. Department of Health, Water Reclamation and Reuse Program, Division of Drinking Water, 1500 West 4th Avenue, Spokane WA 99204

SPECIAL CONDITIONS

S1. WATER QUALITY LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

The production and use of reclaimed water must be in compliance with all specific conditions and requirements of the Washington State Water Reclamation and Reuse Standards, 1997, and is subject to the requirements listed below: to distribute Class A reclaimed water to infiltration basins as listed in Condition S8.H. The distribution of reclaimed water for groundwater recharge via surface percolation is subject to the following treatment, water quality and ground water quality limitations:

Reclaimed Water Limitations					
<u>Parameter</u>	Average Monthly (a) Maximum Daily (b)				
Flow	0.25 MGD	0.50 MGD			
	Oxidized Wastewater – Second	lary Effluent ^c			
<u>Parameter</u>	Average Monthly (a)	Maximum Daily (b)			
CBOD ₅	10 mg/L	15 mg/L			
TSS	15 mg/L	23 mg/L			
Dissolved Oxygen	Shall be measurably present in secondary effluent at all times				
Coagu	ılated/ Filtered Wastewater – I	Prior to Disinfection			
Turbidity	Average Monthly (a) Sample Maximum (d)				
	2 NTU	5 NTU			
Disinfected - Reclaimed Water					
Total Nitrogen	Average Monthly (a)	Sample Maximum (d)			
as N	10 mg/L	15 mg/L			
Total Coliform	7-day Median (e)	Sample Maximum (f)			
	2.2 MPN/ 100 ml	23 MPN/100 ml			
pН	Shall be between 6 and 9 standard units at all times				

(a) The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Reclaimed Water Limitations

- (b) The daily maximum discharge limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day.
- (c) The sampling point for BOD and TSS will be the secondary effluent.
- (d) The sample maximum is defined as the value not to be exceeded by any single sample.
- (e) The median number of total coliform organisms in the reclaimed water after disinfection does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.
- (f) The number of total coliform organisms shall not exceed 23 per 100 milliliters in any single sample.

S2. MONITORING REQUIREMENTS

A. <u>Influent Monitoring</u>

The sampling point for the influent will be at the headworks.

The Permittee shall monitor the wastewater influent according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type
Flow	MGD	Continuous	Recording meter
BOD	mg/l	weekly	24-hour composite
TSS	mg/l	weekly	24-hour composite
Ph	Standard Units	daily	Grab (a)
TKN (as N)	mg/l	weekly	Grab
NO ₃ (as N)	mg/l	weekly	Grab
Total Nitrogen (as N)	mg/l	3/week (b)	Grab
Copper	ug/L	(c)	composite
Mercury	ug/L	(c)	composite
Cadmium	ug/L	(c)	composite
Lead	ug/L	(c)	composite
Priority Pollutant Analysis	ug/L	(c)	composite

- (a) The grab sample for pH shall be taken twice a day on week days and once on weekends and holidays
- (b) the sample will be taken on Monday, Wednesday and Friday
- (c) The required analysis of the priority pollutants and above listed metals will be in the 3rd quarter of 2006 and the 3rd quarter of 2009.

B. <u>Class A Reclaimed Water Effluent Monitoring</u>

The Permittee shall monitor the reclaimed water according to the following schedule:

Parameter Units		Sample Point	Sampling Frequency	Sample Type
Dissolved Oxygen	mg/L	Secondary effluent	Daily	Grab
Flow	MGD	Effluent flow meter ahead of filtration process	Continuous	recording meter
Flow	MGD	Filter bypass flowmeter	Continuous	recording meter
Flow	MGD	Spray field pump station	Continuous	recording meter or pump run time record
CBOD ₅	mg/l	UV disinfection process effluent	weekly	composite
TSS	mg/l	UV disinfection process effluent	weekly	composite
TDS	mg/l	UV disinfection process effluent	monthly	composite
pН	Standard Units	UV disinfection process effluent	Daily	Grab (c)
Total Nitrogen (as N)	mg/l	UV disinfection process effluent	3/week (a)	composite
NO ₃ (as N)	mg/l	UV disinfection process effluent	3/week (a)	composite
Ammonia (as N)	mg/l	UV disinfection process effluent	weekly	composite
Total Coliform	org. per 100 ml	UV disinfection process effluent	Daily (d)	grab

Chlorine	mg/L	Water Reuse	Daily (when in	grab
Residual		Distribution	use)	
		Line		
Coagulant Aid	lbs.	Coagulant Feed	Daily	metered usage
(Polymer)				
Turbidity	NTU	Filter Effluent	Continuous	recording meter
Priority	ug/L	UV disinfection	(b)	composite
Pollutant		process effluent		
Analysis				
Copper	ug/L	UV disinfection	(b)	composite
		process effluent		
Mercury	ug/L	UV disinfection	(b)	composite
		process effluent		
Cadmium	ug/L	UV disinfection	(b)	composite

		process effluent		
Lead	ug/L	UV disinfection	(b)	composite
		process effluent		

- (a) The sample will be taken on Monday, Wednesday and Friday
- (b) The required analysis of the priority pollutants and above listed metals will be in the 3^{rd} quarter of 2006 and the 3^{rd} quarter of 2009.
- (c) The grab sample for pH and dissolved oxygen shall be taken twice a day on week days and once on weekends and holidays.
- (d) As an alternate method, total coliform bacteria may be monitored using the ONPUG-MUG test (also called Autoanalysis Colilert System) per latest edition of standard methods.

C. Ground Water Monitoring

The ground water sampling will be from the monitoring well installed between infiltration lagoons No.1 and No.2. The Permittee shall monitor the ground water according to the following schedule:

Parameter	Units	Minimum Sampling Frequency	Sample Type
Static Water Level	nearest 0.01 Feet	Monthly	Field Measurement
рН	Standard Units	Quarterly (c)	Field Measurement
Conductivity	Micromho/cm	Quarterly (c)	Grab
Total Coliform	org/100 ml	Quarterly (c)	Grab
Temperature	°C	Quarterly (c)	Field Measurement
Chloride	mg/L	Quarterly (c)	Grab
Sulfate	mg/L	Quarterly (c)	Grab
TDS	mg/L	Quarterly (c)	Grab
Iron, Total	mg/L	Quarterly (c)	Grab
Manganese, Total	mg/L	Quarterly (c)	Grab
NO ₃ (as N)	mg/L	Quarterly (c)	Grab
TN (as N)	mg/L	Quarterly (c)	Grab
Ammonia NH ₃ (as N)	mg/L	Quarterly (c)	Grab

Quarterly is defined as: March, June, September, and December.

D. Sludge Monitoring

The Permittee shall monitor biosolids as required by the Biosolids permit.

E. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

All soil analysis and reporting will be in accordance with *Laboratory Procedures*, Soil Testing Laboratory, Washington State University, November 1981, or the most recent, widely accepted equivalent.

F. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

G. Instrument Calibration

Monitoring devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with the manufacturer's recommendations. Calibration records shall be maintained for at least three years.

The Permittee shall also verify the accuracy of on-line turbidimeters at a minimum frequency of at least once every two weeks against a bench top unit, and that unit should be reset against the manufacturer's standard every time it is used. The turbidimeter should be calibrated when they are or continue to trend out of accuracy.

H. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, and internal process control parameters except those listed in Condition S2. are exempt from this requirement.

Crops and soils testing has not been included in the accreditation program. Crops and soils data shall be provided by a reputable agricultural test lab that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than 45 days following the reporting period. The report(s) shall be sent to the following:

- 1. Department of Ecology, 4601 North Monroe, Spokane, Washington 99205.
- 2. Department of Health, Water Reclamation and Reuse Program, Division of Drinking Water, 1500 West 4th Avenue, Spokane WA 99204.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging or reclaiming water. If there was no discharge or the facility was not operating during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results. If the reclamation facility was not operating during a given monitoring period, submit the form as required with the words "no reclamation or reuse" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

The Permittee shall retain all records pertaining to the monitoring of sludge for a minimum of five years.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2. of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
- 2. Repeat sampling and analysis of any violation and submit the results to the Department within 30 days after becoming aware of the violation;
- 3. Immediately, within 24 hours, notify the Departments of Health and Ecology of the failure to comply; and
- 4. Submit a detailed written report to the Department within thirty days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Reclaimed Water Operational Records

 Operating records shall be maintained at the reclamation treatment plant or within a central depository within the Permittee's operating agency. These records shall include: records of all analyses performed, records of operational problems, unit process and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventative action taken.

- 2. Process or equipment failures triggering an alarm that is key to maintaining reliability of reclaimed water quality shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.
- 3. A monthly summary of operating records as specified above shall be submitted with the Discharge Monitoring Report form to The Departments of Ecology and Health at that address listed below.
- 4. If the reclamation facility was not operating during a given monitoring period, submit the required reports with the words 'no discharge' entered in place of the monitoring results.
- 5. Cross Connection Control Report. An annual cross-connection control report shall be submitted to the Departments of Health (ODW) by a certified Cross-Control Specialist identifying all devices tested and any cross-connection incidents which occurred in the reuse system.

S4. FACILITY LOADING

A. Design Criteria

Flows or waste loadings of the following design criteria for the permitted treatment facility shall not be exceeded:

B. Plans for Maintaining Adequate Capacity

When the actual flow or wasteload reaches 85 percent of any one of the design criteria in S4.A. for three consecutive months, or when the projected increases would reach design capacity within five years, whichever occurs first, the Permittee shall submit to the Department, a plan and a schedule for continuing to maintain capacity at the facility sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet this objective.

- 1. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
- 2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.

- 3. Limitation on future sewer extensions or connections or additional wasteloads.
- 4. Modification or expansion of facilities necessary to accommodate increased flow or wasteload.
- 5. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or wasteload.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," Section I, Article 8 of the *Water Reclamation & Reuse Standards*, and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Wasteload Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by September 1, 2005, and annually thereafter. The report shall contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings; and (except for the first report) the percentage increase in these parameters since the last annual report. The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above. The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

S5. OPERATION AND MAINTENANCE

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit.

A. Certified Operator

An operator certified for at least a Class 3 plant by the State of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class 2 plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire reclamation system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system, pumping stations, distribution and use areas. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

- 1. At all times, the reclamation facility, distribution and use areas shall be maintained to ensure that all equipment is kept in a reliable operating condition.
- 2. A chlorine residual of at least 0.5 mg/l shall be maintained in the reclaimed water during conveyance from the reclamation plant to the use area unless waived by the Departments of Health and Ecology.
- 3. Maintenance of chlorine residual is not required in reclaimed water impoundments and storage ponds. At the discretion of the Departments of Health and Ecology, chlorine residual may not be required in reclaimed water distributed from storage ponds.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of their obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the water reclamation plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes. The Permittee shall maintain Reliability Class I (EPA 430-99-74-001) at the water reclamation plant, which requires power sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions. The power supply shall be provided with one of the following reliability features to assure that inadequately treated wastewater is not discharged to distribution or use areas:

- 1. An alarm and a standby power source
- 2. An alarm and automatically actuated short-term storage or alternative disposal provisions All equipment other than pump-back equipment shall be either independent of the normal power supply or provided with a standby power supply.
- 3. Automatically actuated long-term storage or disposal provisions. All equipment other than pump-back equipment shall be either independent of the normal power supply or provided with a standby power supply.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

The Permittee shall immediately notify the Department of any spill, overflow, or bypass from any portion of the collection or treatment system.

Bypass to the reclaimed water use area is prohibited. See Condition S.8C., Reclaimed Water Use.

The bypass of wastes from any portion of the collection or treatment system is prohibited unless one of the following conditions (1, 2, or 3) applies:

- 1. Unavoidable Bypass -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
 - If the resulting bypass from any portion of the treatment system results in noncompliance with this permit the Permittee shall notify the Department in accordance with condition S3.E "Noncompliance Notification."
- 2. Anticipated Bypass That Has The Potential to Violate Permit Limits or Conditions -- Bypass is authorized by an administrative order issued by the Department. The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Department will consider the following prior to issuing an administrative order:
 - a. If the bypass is necessary to perform construction or maintenancerelated activities essential to meet the requirements of the permit.
 - b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
 - c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The Grant County Health District and the public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to

bypass will be by administrative order issued by the Department under RCW 90.48.120.

3. Bypass For Essential Maintenance Without the Potential to Cause Violation of Permit Limits or Conditions -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by the Department prior to the bypass.

G. Operations and Maintenance Manual

The O&M Manual shall be reviewed by the Permittee at least annually. The Permittee shall confirm the review by letter and/or a manual update to the Department. All manual changes or updates shall be submitted to the Department whenever they are incorporated into the manual. The approved operation and maintenance manual shall be kept available at the treatment plant.

All operators shall follow the instructions and procedures of this manual.

S6. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

S7. PRETREATMENT

The Permittee shall work cooperatively with the Department to ensure that all commercial and industrial users of the wastewater treatment system are in compliance with pretreatment regulations.

A. <u>Discharge Authorization Required</u>

Significant commercial or industrial operations shall not be allowed to discharge wastes to the Permittee's sewerage system until they have received prior authorization from the Department in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended. The Permittee shall immediately notify the Department of any proposed new sources of wastewater from significant commercial or industrial operations.

B. Prohibitions

A non-domestic discharger may not introduce into the Permittee's sewerage system any pollutant(s) that cause pass through or interference.

The following non-domestic discharges shall not be discharged into the Permittee's sewerage system.

- 1. Pollutants that create a fire or explosion hazard in the domestic wastewater facilities (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).
- 2. Pollutants that will cause corrosive structural damage to the domestic wastewater facilities, but in no case discharges with pH lower than 5.0 standard units or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.
- 3. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.
- 4. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
- 5. Heat in amounts that will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities such that the temperature at the POTW exceeds 40°C (104°F) unless the Department, upon request of the Permittee, approves, in writing, alternate temperature limits.
- 6. Petroleum oil, non-biodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
- 7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.
- 8. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.
- 9. As provided by WAC 173-303-071(3)(a), discharges of dangerous wastes into the sewerage system by industrial or commercial users are prohibited unless the discharger has submitted an application for a State Waste Discharge Permit. The applicant must accurately describe the wastewater on a State Waste Discharge Permit Application for Industrial Discharges to a POTW (Ecology Form 040-177).
- 10. Noncontact cooling water in significant volumes.
- 11. Stormwater, and other direct inflow sources.
- 12. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.

C. Notification of Industrial User Violations

The Permittee shall notify the Department if any non-domestic user violates the prohibitions listed in S7.B above.

D. Local Sewer Ordinance

The Permittee shall review the sewer user ordinance and amend as necessary. A copy of the ordinance shall be submitted to the Department when it is amended and adopted by the City.

S8. RECLAIMED WATER DISTRIBUTION AND USE

A. Authorized Uses and Locations

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to distribute water reclaimed in accordance with the terms and conditions of this permit for authorized uses.

The distribution by the Permittee of reclaimed water that does not meet the treatment, water quality and monitoring requirements established in this permit or the use of reclaimed water other than for authorized uses and locations listed in a Department of Health and Ecology approved reclaimed water engineering report shall constitute a violation of the terms and conditions of this permit.

The Permittee may produce and distribute Class A reclaimed water for the following uses at the following locations:

- Three infiltration/storage basins located on the treatment plant site east and south of the treatment facility and used for ground water recharge.
- Quarter circle (11.5-acre) spray irrigation field located directly south of the water reclamation treatment facility used to grow mint, alfalfa, wheat, and turf grass.

B. Water Reuse Plan

If there are any changes or amendments to the approved Facilities Plan (Water Reuse Plan), the Permittee shall prepare a water reuse plan, which contains a summary description of the proposed water reuse system from the approved Engineering Report. The plan shall be submitted to the Departments of Health and Ecology prior to the effective date of that Use. The Permittee shall review the plan at least annually and plan shall be updated whenever new uses or users are added to the distribution system. A copy of the revised plan shall be submitted to Ecology and Health. The plan shall contain, but not be limited to, the following:

- 1. The Reuse Plan must specifically conform to Section I, Article 8 Engineering Report in the Standards.
- 2. Description of the reuse distribution system;
- 3. Identification of uses, users, location of reuse sites.
- 4. Evaluation of reuse sites, estimated volume of reclaimed water use, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality

and hydrogeological information necessary to evaluate potential water quality impacts.

C. <u>Bypass Prohibited</u>

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass lagoon.

The Departments of Ecology and Health shall be notified by telephone within 24 hours of any diversion to a bypass lagoon. Substandard wastewater shall not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology

D. Reliability

The Permittee shall maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

- 1. Alarms and standby power source
- 2. Alarms and automatically actuated short-term (24 hour) storage or disposal provisions.
- 3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

E. Use Area Responsibilities

- 1. A standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.
- 2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area.
- 3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department of Ecology or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.
- 4. Where the reclaimed water production, distribution and use areas are under direct control of the Permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

F. Service and Use Area Agreement

Where the reclaimed water additional treatment, distribution system or use area is not under direct control of the Permittee:

- 1. The person(s) who provides additional treatment, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this Permit.
- 2. Reclaimed water use, including runoff and spray, shall be confined to the designated and approved use areas.
- 3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This Service and Use Area Agreement must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997. A copy of each Service and Use Area Agreement must be submitted to and approved by the Departments of Health and Ecology prior to implementation.
- 4. The Service and Use Area Agreement shall provide the Permittee with authority to terminate service of reclaimed water to a customer violating the states Water Reclamation and Reuse Standards and restrictions outlined in the reclaimed water use agreement. The Service and Use Area Agreements shall be approved by the Departments of Health and Ecology prior to the distribution of any reclaimed water.
- 5. No reclaimed water shall be distributed by the Permittee without a Service and Use Area Agreement approved by the Departments of Health and Ecology.

G. Reclaimed Water Ordinance

If necessary, the Permittee shall complete a local ordinance to include policies and procedures for the distribution and delivery of reclaimed water. The ordinance shall provide the Permittee with the authority to terminate service of reclaimed water from any customer violating the state Water Reclamation and Reuse Standards and restrictions outlined in the service and use agreement.

H. Irrigation Use

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water shall be determined based on a detailed water balance analysis. The calculated loading rate(s) and the parameters and methods used to determine the loading rate(s) shall be submitted to the Washington Department of Ecology for approval.

- 2. There shall be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved Service and Use Area Agreement.
- 3. There shall be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.
- 4. The reclaimed water shall not be applied to the irrigation lands in quantities that:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Cause long-term anaerobic conditions in the soil.
 - c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.
 - d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee shall inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

I. Surface Percolation Use

- 1. For surface percolation of reclaimed water in any non-approved storage infiltration basin, the hydraulic loading rate shall be determined based on a detailed water balance. The calculated loading rate(s) and the parameters and methods used to determine the loading rates shall be submitted to the Department of Ecology for approval along with the irrigation use report above and is due prior to initiation of that infiltration basin.
- 2. Background/natural groundwater quality must be documented and sampling locations identified and approved by Ecology.
- 3. Surface waters shall not be impaired due to the infiltration of reclaimed water.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed as follows:

- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by the person described above and is submitted to the Department at the time of authorization, and
 - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G2. RIGHT OF ENTRY

Representatives of the Department shall have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours; hours during which production, treatment, or discharge occurs; or times when the Department suspects a violation requiring immediate inspection. Representatives of the Department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G3. PERMIT ACTIONS

This permit shall be subject to modification, suspension, or termination, in whole or in part by the Department for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least 60 days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G5. NOTIFICATION OF NEW OR ALTERED SOURCES

The Permittee shall submit written notice to the Department whenever any new discharge or increase in volume or change in character of an existing discharge into the sewer is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the collection or treatment system; (2) would increase the total system flow or influent waste loading by more than 10 percent; (3) is not part of an approved general sewer plan or approved plans and specifications; or would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the system's ability to adequately transport and treat the added flow and/or wasteload.

G6. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G9. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G10. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.